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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,621	10/10/2001	Brian B. Lee	P-8779.01	9409
27581	7590	09/17/2004	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MS-LC340 MINNEAPOLIS, MN 55432-5604			EVANISKO, GEORGE ROBERT	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,621

Applicant(s)

LEE ET AL.

Examiner

George R Evanisko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35, 37-47, 49-51, 53-63, 65-67 and 69-80 is/are rejected.
- 7) ☒ Claim(s) 36, 48, 52, 64, 68 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 35, 37, 47, 49-51, 53, 63, 65-67, 69, 79, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al (5908392).

Wilson discloses the claimed invention except for the electrogram signal to be obtained via at least a pair of subcutaneous electrodes spaced from the heart. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in or to modify the electrogram sensing system as taught by Wilson, with a pair of subcutaneous electrodes spaced from the heart, with the electrogram signal to be obtained via at least the pair of subcutaneous electrodes spaced from the heart since it was known in the art that electrogram

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sensing systems use at least a pair of subcutaneous electrodes spaced from the heart to obtain the electrogram signal so the signal is free from residual pacing after-potentials.

In the alternative, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the electrogram sensing system as taught by Wilson with the electrogram signal to be obtained via at least a pair of subcutaneous electrodes spaced from the heart, because Applicant has not disclosed that the electrogram signal to be obtained via at least a pair of subcutaneous electrodes spaced from the heart provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the electrogram to be obtained by sensing leads in the heart as taught by Wilson, because the leads provide easily sampled and easily processed signals from the heart. In addition, the applicants specification states on pages 17, 21, and 28 that the system can be used in pacemakers and with leads.

Therefore, it would have been an obvious matter of design choice to modify Wilson to obtain the invention as specified in the claim(s).

Claims 38-46, 54-62, and 70-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al.

Wilson discloses the claimed invention except for the steps, instructions, or means for compressing ECG signals prior to recording, for recording noise trigger signals in the ECG data record, and for parsing and displaying waveforms and icons of the trigger and/or noise signals from the ECG signals. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the recording and storage system as taught by Wilson,

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with the steps, instructions, or means for compressing ECG signals prior to recording, for recording noise trigger signals in the ECG data record, and for parsing and displaying waveforms and icons of the trigger and/or noise signals from the ECG signals since it was known in the art that recording and storage systems use steps, instructions, or means for: compressing ECG signals prior to recording to increase the amount of data that can be recorded; recording noise trigger signals in the ECG data record to determine where the ECG data may be invalid; and parsing and displaying waveforms and icons of the trigger and/or noise signals from the ECG signals so the physician can determine if the system is operating correctly, to analyze all the data at the same time, and/or to determine where arrhythmias may have started or where the ECG signal is invalid due to noise.

Allowable Subject Matter

Claims 36, 48, 52, 64, and 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 8/11/04 have been fully considered but they are not persuasive since the examiner has provided references showing the use of subcutaneous electrodes. Yomtov et al (5313953) and Bennett et al (5331966) are two teachings of many showing the use of subcutaneous electrodes spaced from the heart to obtain the electrogram signal. In addition, Bennett et al shows the use of SubQ electrodes on a pacemaker.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R Evanisko whose telephone number is 703 308-2612. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George R Evanisko
Primary Examiner
Art Unit 3762

9/15/04

GRE

September 15, 2004